



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/625,772 | 07/24/2003 | Takuya Uchiyama | 1713.1006 | 7854 |

21171 7590 07/27/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

| |
|----------|
| EXAMINER |
|----------|

WALSH, DANIEL I

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2876

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,772

Applicant(s)

UCHIYAMA ET AL.

Examiner

Daniel I. Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7, 17, 18 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7, 17, 18 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 15 May 2006.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 2, 3, 4, 7, 17-18, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inudou et al. (JP 2000-090215).

Re claim 2, Inudou et al. teaches a non-contact IC card reader device (1), antennas that perform wireless transmission and reception of carrier waves between the non-contact IC card reader/writer device and a non-contact IC card to detect location of the card (FIG. 2). Though silent to a control unit for location calculation/processing, the Examiner notes that Inudou et al.

teaches card detector 32, and it would have been obvious to one of ordinary skill in the art that such a unit can be interpreted as a control unit to detect the card location, as the location is detected. Inudou et al. teaches a matrix of antennas in a plane (drawing 2). The Examiner notes that as there is a 2-d matrix array of antennas, and the position/location is detected within the matrix, a 2-d location is interpreted as being calculated. The array is interpreted as a plane.

Inudou et al. is silent to simultaneously or alternately (sequentially) driving the antennas.

Chung teaches alternately/sequentially driving antennas (paragraph [0070]) in order to reduce interference, or can be simultaneously driven

At the time the invention was made, it would have been obvious to combine the teachings of Inudou et al. with those of Chung.

One would have been motivated to do this in order to reduce interference or to drive simultaneous to determine location quicker (re claims 4 and 18). The Examiner notes that the Applicants specification appears to teach that alternately and sequentially are interchangeable (paragraph [0101]), and the Examiner has examined consistent with such teachings.

Re claim 3, the Examiner notes that it is obvious that based on which antennas received signals (distribution) that the location is determined.

Re claim 4, the limitations have been discussed above. The Examiner notes that voltage levels are detected (see paragraph [0017] and FIG. 3 of Inudou et al.). The Examiner notes that the teachings of Inudou et al. teach processing of signals and driving and detection of voltages from the antennas. Accordingly, it would have been obvious that control unit/detector means as claimed, are provided, in order to perform such functions.

Re claim 7, Inudou et al. teaches a detector that detects the voltage level of each of the carrier waves received from the non-contact IC card via the antennas and a control unit that calculates the location of the non-contact IC card based on the detected voltage levels detected by the detector (see paragraph [0017] and FIG. 3).

Re claims 17-18, the limitations have been discussed above.

Re claim 24 and 25, the limitations have been discussed above.

Re claim 24 the Examiner notes that as the antennas are driven, it would have been obvious to either drive them sequentially/alternately or simultaneously, in order to drive them at all.

3. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inudou et al./Chung, as discussed above, in view of Teicher et al. (US 6,257,486).

The teachings of Inudou et al./Chung have been discussed above.

Inudou et al./Chung are silent to a touchpad for an operator to use in response to a request from an external device.

Teicher et al. teaches such limitations in a contactless smart card with keypad to be used by an operator to communicate with an external device (FIG. 15b for example).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Inudou et al./Chung with those of Teicher et al.

One would have been motivated to do this in order to have a secure means to communicate a PIN for example (see abstract of Teicher et al.).

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The Examiner disagrees with the Applicants statement that the Examiner has acknowledged that Inudou does not disclose or suggest the feature of claim 7 (page 1 of Applicants Response). The Examiner is unclear on this statement, as claim 7 has been amended, it is unclear how the Examiner acknowledged that Inudou did not teach a figure of amended claim 7.

5. In response to the Applicants argument that the prior art does not teach "antennas which are arranged in a matrix in one plane" (page 1 of Applicants Response) the Examiner directs the Applicant to Drawing 8 of Inudou et al. showing a plane of a matrix of antennas.

6. In response to the Applicants argument that the prior art does not teach the antennas are driven alternatively, sequentially, or simultaneously, the Examiner notes that in order for the antennas to be driven, they must be driven in a chosen way. Therefore, it is obvious to either drive them all at once, or sequentially, as a means to drive them. The Examiner notes that Chung

teaches sequentially (alternately) or simultaneous activation, as cited in the action. The Examiner maintains that advantages to sequential activation include reducing interference, and the obvious advantage to simultaneous activation is faster detection since antennas are activated at once.

7. In response to the Applicants argument that Chung is not applicable because it cannot detect 2-d positions (page 2 of Remarks) the Examiner notes that the 2-d location is interpreted as being detected by Inudou et al., and Chung is being relied upon for activation of antennas.

8. Re the Applicants arguments to claims 3-4 and 17-18, they are addressed above.

9. Re claim Applicants arguments to claim 23, the Examiner notes this has been addressed above. Additionally, Teicher is believed to include an external device as claimed.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel I Walsh
Examiner
Art Unit 2876
7-10-06

